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标题: PLANAR SYMMETRIC NORMAL AND COMPLEMENTARY THREE-RESONANCE RESONATORS IN TERAHERTZ BAND

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摘要: Metamaterials are artificially structured electromagnetic materials which can lead to the realization of phenomena that cannot be obtained with natural materials. In the terahertz frequency regime, metamaterials have distinguished performance and open up a new way to design and construct the functional devices. Based on the structure of metamaterials, planar symmetric normal and complementary three-resonance resonators in Terahertz band are proposed in this paper. Simulation and experimental study have been carried out. The results show that the proposed structure has three distinct and strong resonant bands in THz regime and that symmetric normal structure and complementary structure can realize the three stop-resonances and pass-resonances respectively. For the well-separating of different resonances in the terahertz band, these symmetric three-passband and three-stopband resonators will be used in the design of multiband terahertz devices.

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